

ABSTRACT

A stent introducer apparatus comprising an introducer catheter and a pusher assembly configured to deliver a stent, such as a self-expanding stent, within a tortuous duct or vessel, even if the pusher member is acutely positioned during deployment. The pusher assembly includes a first tubular portion comprising a material with high column strength and a shorter second tubular portion made of a highly flexible material. The second tubular portion is divided into a distal, stent-carrying section and a proximal, flexible section. The second tubular portion may be made of a smaller diameter than the first tubular portion to reduce possible impingement by the introducer catheter as the latter kinks during a procedure. A soft pusher member is disposed at location between the stent-carrying and flexible sections to absorb preload pressure and to urge the stent from the distal end of the introducer catheter.